

## ABSTRACT OF THE DISCLOSURE

Embodiments of the present invention include prepress workflow methods. The prepress workflow methods include generating  $N$  spot color separations from the color source image, wherein  $N$  is less than four. The  $N$  spot color separations, when  
5 superimposed, form a reproduction composite image similar in color to the source image. Alternatively,  $N$  non-process color separations obtained from Duotone, Tritone, or Quadtone images may also be employed. The methods may optionally include processing the generated  $N$  digital spot color separations to achieve misregistration tolerant printing prior to screening. The methods further include screening the  $N$  spot  
10 color separations, wherein at least one of the  $N$  spot color separations is screened using frequency modulation (FM).